

CLAIMS

SUB A²⁷ 1. A multi-carrier base station operating within a predetermined set
2 of frequencies wherein data components of forward link data are transmitted
simultaneously on a plurality of frequency bands, said base station comprising:
4 a first transmission subsystem for transmitting a sync channel message
on a single carrier frequency of a set of frequencies of said multi-carrier system;
6 and
at least one additional transmission subsystem for transmitting
8 remaining components of said forward link data.

2. The base station of Claim 1 wherein said sync channel message
2 indicates the center frequency of at least one multi carrier system in said
predetermined set of frequencies.

SUB C¹ 3. The base station of Claim 1 wherein said sync channel message
2 indicates the frequency of a single carrier system in said predetermined set of
frequencies.

4. The base station of Claim 2 wherein said sync channel message
2 indicates the frequency of a single carrier system in said predetermined set of
frequencies.

SUB C¹ 5. The base station of Claim 2 wherein said sync channel message is
2 transmitted on one of a set of a preferred frequency channels wherein the
number of frequencies in said set of preferred frequency channels is less
4 number of frequencies in said predetermined set of frequencies.

6. The base station of Claim 5 wherein said set of predetermined
2 frequencies are the set of frequency bands in a personal communications
system block of frequencies.

7. The base station of Claim 6 wherein the channel numbers of the
2 set of preferred frequency channels are 75, 150 and 225.

SUB A²⁸ 8. A multi-carrier mobile station comprising:

